

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A nitride semiconductor laser element comprising: a semiconductor stacked structure including a semiconductor layer of a first conductivity type, an active layer and a semiconductor layer of a second conductivity type, which are stacked one upon the other and each comprises a nitride, wherein the semiconductor stacked structure defines, when viewed in plan, a quadrangle having four right angles and having a first edge, a second edge opposing the first edge, a third short edge and a fourth short edge opposing the third short edge; a striped waveguide region for a laser light provided on the semiconductor layer of the second conductivity type, wherein the striped waveguide region extends parallel to the first/second edges of the quadrangle; and an insulative region for reducing the capacitance of the element, wherein a pn-junction of the semiconductor layer at a peripheral region remote from the waveguide region is broken, forming the insulative region, wherein the insulative region defines a rectangle when viewed in plan, the rectangle having a first long edge extending parallel to a longitudinal direction of the striped waveguide region, a second long edge opposing the first long edge and positioned nearer to the striped waveguide region than the first long edge, a first short edge and a second short edge opposing the first short edge, with the first short edge being positioned nearer to the third short edge of the quadrangle than the second short edge, wherein the first long edge of the rectangle is remote from the first edge of the quadrangle, and the first and second short edges of the rectangle are remote from the third and fourth short edges of the quadrangle, respectively. an external edge of the insulative region being remote from an external edge of the active layer when viewed in plan.

Claim 2 (Canceled).

3. (Previously Presented) The nitride semiconductor laser element according to claim 1, wherein the insulative region for reducing the capacitance of the element is a region formed by implanting ions from the surface of the semiconductor layer of the second conductivity type.

4. (Currently Amended) A nitride semiconductor laser element comprising:
a substrate; a semiconductor stacked structure including a semiconductor layer of a first conductivity type, an active layer and a semiconductor layer of a second conductivity type, which are stacked on a main surface of the substrate and each comprises a nitride, wherein the semiconductor stacked structure defines, when viewed in plan, a quadrangle having four right angles and having a first edge, a second edge opposing the first edge, a third short edge and a fourth short edge opposing the third short edge;
a striped waveguide region for a laser light provided on the semiconductor layer of the second conductivity type, wherein the striped waveguide region extends parallel to the first/second edges of the quadrangle; an embedded insulation film covering a side face of the waveguide region and a surface of the semiconductor layer of the second conductivity type; a first electrode in contact with a surface of the waveguide region; a protective insulation film covering at least a part of the embedded insulation film; a second electrode substantially connected to the semiconductor layer of the first conductivity type; and an insulative region for reducing the capacitance of the element, provided by converting at least a part of the semiconductor layer at a peripheral region remote from the waveguide region into a higher resistance one by ion implantation, wherein the insulative region defines a rectangle when viewed in plan, the rectangle

having a first long edge extending parallel to a longitudinal direction of the striped waveguide region, a second long edge opposing the first long edge and positioned nearer to the striped waveguide region than the first long edge, a first short edge and a second short edge opposing the first short edge, with the first short edge being positioned nearer to the third short edge of the quadrangle than the second short edge, wherein the first long edge of the rectangle is remote from the first edge of the quadrangle, and the first and second short edges of the rectangle are remote from the third and fourth short edges of the quadrangle, respectively. an external edge of the insulative region being remote from an external edge of the active layer when viewed in plan.

5. (Previously Presented) The nitride semiconductor laser element according to claim 1, wherein the insulative region for reducing the capacitance of the element has an impurity peak concentration in the range from 1×10^{18} to 5×10^{21} atoms/cm³.

6. (Previously Presented) The nitride semiconductor laser element according to claim 1, wherein the insulative region for reducing the capacitance of the element has a peak of distribution of the impurity concentration in the depth direction in the range from 200 nm to 1 μ m from the surface of the semiconductor layer of the second conductivity type.

7. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein the first electrode is formed in contact with the surface of the waveguide region so as to cover a part of the embedded insulation film, a pad electrode is formed in contact with the first electrode so as to cover a part of the

protective insulation film, and the insulative region for reducing the capacitance of the element includes a region below the embedded insulation film.

8. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein the first electrode is formed in contact with the surface of the waveguide region so as to cover a part of the embedded insulation film, a pad electrode is formed in contact with the first electrode so as to cover a part of the protective insulation film, and the insulative region for reducing the capacitance of the element includes a region below the first electrode or the pad electrode.

9. (Previously Presented) The nitride semiconductor laser element according to claim 1, wherein the semiconductor laser element is a laser element for emitting bluish-purple light, and has responsiveness to input of pulse drive current of 1 ns or less.

Claim 10 (Canceled).

11. (Currently Amended) A nitride semiconductor laser element comprising:
a semiconductor stacked structure including a semiconductor layer of a first conductivity type, an active layer and a semiconductor layer of a second conductivity type being different from the first conductivity type, which are stacked on a main surface of a substrate and each comprises a nitride, wherein the semiconductor stacked structure defines, when viewed in plan, a quadrangle having four right angles and having a first edge, a second edge opposing the first edge, a third short edge and a fourth short edge opposing the third short edge; and a striped waveguide region for a laser light provided on the semiconductor layer of the second conductivity type, wherein the striped

waveguide region extends parallel to the first/second edges of the quadrangle, wherein at least a part of the semiconductor layer of the second conductivity type serves as a region for reducing the capacitance of the element by being converted into the first conductivity type in a direction of thickness at a peripheral region remote from the waveguide region, wherein the region for reducing the capacitance of the element defines a rectangle when viewed in plan, the rectangle having a first long edge extending parallel to a longitudinal direction of the striped waveguide region, a second long edge opposing the first long edge and positioned nearer to the striped waveguide region than the first long edge, a first short edge and a second short edge opposing the first short edge, with the first short edge being positioned nearer to the third short edge of the quadrangle than the second short edge, wherein the first long edge of the rectangle is remote from the first edge of the quadrangle, and the first and second short edges of the rectangle are remote from the third and fourth short edges of the quadrangle, respectively. ~~an external edge of the insulative region being remote from an external edge of the active layer when viewed in plan.~~

12. (Original) The nitride semiconductor laser element according to claim 11, having an npn structure in the peripheral region remote from the waveguide region, wherein the semiconductor layer of the first conductivity type is an n-type semiconductor layer, and the semiconductor layer of the second conductivity type is a p-type semiconductor layer.

13. (Original) The nitride semiconductor laser element according to claim 11, having a pnpn structure in the peripheral region remote from the waveguide region, wherein the semiconductor layer of the first conductivity type is an n-type semiconductor

layer, and the semiconductor layer of the second conductivity type is a p-type semiconductor layer.

14. (Currently Amended) A bluish-purple light emitting laser element comprising: a semiconductor stacked structure including a semiconductor layer of a first conductivity type, an active layer and a semiconductor layer of a second conductivity type, which are stacked one upon the other and each comprises a nitride, wherein the semiconductor stacked structure defines, when viewed in plan, a quadrangle having four right angles and having a first edge, a second edge opposing the first edge, a third short edge and a fourth short edge opposing the third short edge; and a striped waveguide region of a laser light provided on the semiconductor layer of the second conductivity type, wherein the striped waveguide region extends parallel to the first/second edges of the quadrangle, wherein the element comprises an insulation region for reducing the capacitance of the element in a peripheral region remote from the waveguide region, wherein the region for reducing the capacitance of the element defines a rectangle when viewed in plan, the rectangle having a first long edge extending parallel to a longitudinal direction of the striped waveguide region, a second long edge opposing the first long edge and positioned nearer to the striped waveguide region than the first long edge, a first short edge and a second short edge opposing the first short edge, with the first short edge being positioned nearer to the third short edge of the quadrangle than the second short edge, wherein the first long edge of the rectangle is remote from the first edge of the quadrangle, and the first and second short edges of the rectangle are remote from the third and fourth short edges of the quadrangle, respectively. an external edge of the insulative region being remote from an external edge of the active layer when viewed in plan and wherein responsiveness of the element with respect to input of a pulse drive current is 1 ns or less.

15. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein the first electrode is formed in contact with the surface of the waveguide region so as to cover a part of the embedded insulation film, and the insulative region for reducing the capacitance of the element includes a region below the first electrode.

16. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein the insulative region for reducing the capacitance of the element is present remote from a resonance surface of the semiconductor element.

17. (Previously Presented) The nitride semiconductor element according to claim 1, wherein the semiconductor stacked structure is rectangular when viewed in plan.

Claim 18 (Canceled).

19. (Previously Presented) The nitride semiconductor element according to claim 4, wherein the semiconductor stacked structure is rectangular when viewed in plan.

20. (Previously Presented) The nitride semiconductor element according to claim 11, wherein the semiconductor stacked structure is rectangular when viewed in plan.

21. (Previously Presented) The nitride semiconductor element according to claim 14, wherein the semiconductor stacked structure is rectangular when viewed in plan.

22. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein a plurality of the insulative region are provided along the striped waveguide region, spaced from each other.

23. (Previously Presented) The nitride semiconductor laser element according to claim 4, wherein the insulative region is provided so that portion thereof facing the waveguide region is rugged.